

Taxation

Owners of capital have an economic incentive to diversify their capital holdings. When capital held in one form is earning a higher rate of return than capital held in other forms, owners have incentive to expand their holdings of the former through diminished holdings of the latter and investments in the former. This incentive will remain until rates of return are equal across all capital holdings. We denote this equal rate of return as the reservation rate (r). The presence of taxes, however, means that the owner must achieve a higher gross rate of return, called a hurdle rate (h), to ensure that the net of tax rate achieves its reservation value. The difference between the hurdle rate and the reservation rate is the tax wedge, and the marginal effective tax rate on income from capital is measured as the ratio of this wedge and the hurdle rate (t^m).

Two important results concerning the measure of the marginal effective tax rate are that, in general, it can be significantly different from the statutory rate of taxation, and the effective rate associated with income from capital often varies significantly for capital of different durabilities, statutory tax lives, patterns of ownership, or geographic locations. The marginal effective tax rate also adjusts with changes in macroeconomic factors, such as revised inflationary expectations and changing reservation values. Since each of these factors is explicitly represented in our modeling framework (some exogenously specified), this section presents a summary of tax rates on marginal income from capital, based on the structure of aggregation presented in table 2.

The fundamental principles of capital theory were refined by Hall and Jorgenson to where information on capital stock (price and quantity) can be directly converted to measures of the flow of services from capital in the process of production. The focal point of this methodology is the user cost of capital, which represents the market price of capital services. When the user cost of capital is adapted to account for the incentive effects created by a tax system, which drives a wedge between buyer and seller price of capital services (see King and Fullerton), it is possible to measure the marginal effective tax rate on income from capital. While this measure is data intensive, it is also intuitive and transparent.

Readers interested in this methodology can refer to “Computing the Marginal Effective Tax Rate on Income From Capital,” in the appendix.

Comparisons of Federal Marginal Tax Rates on Income From Capital and Labor

We computed the tax rates on the 15 primary factors used in the model for each of the 7 industry aggregates in each production region. Table 5 presents the results for the Federal factor taxes, providing further breakdowns of “other” industry for construction of owner-occupied shelter. The well-known corporate wedge is quite evident in the table. For example, the overall U.S. average tax on corporate income from computers and office equipment by the service, mining, and trade industry is more than double that for noncorporate income (0.14) from the same machinery. The overall tax on capital by industry has a standard deviation of 38.3 percent of the mean tax on capital. The largest standard deviation across industries by type of capital is for both corporate and noncorporate plants and for owned versus leased residential shelter. The standard deviation of the tax in labor across industries is 2.1 percent of the mean tax on labor income. Food manufacturers face a 38-percent marginal Federal tax rate on capital income, while farms face around a 21-percent marginal tax on capital. All other industries have tax rates between these two extremes and are heavily skewed toward the higher end. In services, mines, and trade and farm industries, labor is taxed more than capital at the margin when the insurance trust is factored in, while all other industries face higher taxes on capital.

This national disposition of factor taxes gives a glimpse of potential resource allocation issues associated with Federal fiscal policies. With labor uniformly taxed across industry, any reform of tax rules to a more neutral system should not lead to major migration of labor across industry. At another level, however, industries that have lower taxes on labor will face higher rates after reform, since the insurance trust tax would not be part of such reform. This result would lead these industries to replace some of their labor services with capital. The nearly 40 percent standard deviation of industry capital

Table 5--Federal primary factor tax wedges, by industry, region, and factor type

Region/ factor	Cash Farms	grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per dollar of value added</i>									
Appalachian:									
Corporate--									
Computers/office equipment	0	0	0.368	0.363	0.352	0.367	0.348	0.381	0
Service and furnishing equipment	0	0	0.368	0.373	0.374	0.366	0.384	0.368	0
Heavy machinery	0	0	0.377	0.380	0.379	0.360	0.357	0.372	0
Transportation equipment	0	0	0.435	0.439	0.434	0.437	0.426	0.428	0
Industrial plants	0	0	0.440	0.445	0.440	0.441	0.390	0.421	0
Utility plants	0	0	0	0	0	0	0.288	0.174	0
Noncorporate--									
Computers/office equipment	0.152	0.151	0	0	0	0	0.178	0.197	0
Service and furnishing equipment	0.131	0.130	0	0	0	0	0.203	0.184	0
Heavy machinery	0.157	0.151	0	0	0	0	0.182	0.190	0
Transportation equipment	0.183	0.183	0	0	0	0	0.250	0.246	0
Industrial plants	0.085	0.084	0	0	0	0	0.206	0.233	0
Utility plants	0	0	0	0	0	0	0.118	-0.002	0
Farmland	0.268	0.268	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.221	0	0.039
Labor services ¹	0.344	0.341	0.339	0.335	0.338	0.340	0.338	0	0
Corn Belt:									
Corporate--									
Computers/office equipment	0	0	0.350	0.343	0.331	0.346	0.322	0.356	0
Service and furnishing equipment	0	0	0.352	0.345	0.349	0.346	0.359	0.344	0
Heavy machinery	0	0	0.360	0.353	0.360	0.346	0.332	0.348	0
Transportation equipment	0	0	0.420	0.415	0.415	0.419	0.398	0.406	0
Industrial plants	0	0	0.426	0.420	0.420	0.423	0.366	0.397	0
Utility plants	0	0	0	0	0	0	0.256	0.159	0
Noncorporate--									
Computers/office equipment	0.150	0.147	0	0	0	0	0.144	0.164	0
Service and furnishing equipment	0.125	0.122	0	0	0	0	0.169	0.151	0
Heavy machinery	0.152	0.145	0	0	0	0	0.156	0.157	0
Transportation equipment	0.188	0.186	0	0	0	0	0.219	0.217	0
Industrial plants	0.067	0.064	0	0	0	0	0.173	0.199	0
Utility plants	0	0	0	0	0	0	0.067	-0.022	0
Farmland	0.267	0.268	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.218	0	0.041
Labor services ¹	0.342	0.344	0.333	0.334	0.335	0.336	0.337	0	0
Delta States:									
Corporate--									
Computers/office equipment	0	0	0.340	0.338	0.331	0.332	0.311	0.338	0
Service and furnishing equipment	0	0	0.341	0.339	0.350	0.332	0.348	0.331	0
Heavy machinery	0	0	0.349	0.347	0.352	0.324	0.315	0.336	0
Transportation equipment	0	0	0.411	0.410	0.413	0.409	0.383	0.395	0
Industrial plants	0	0	0.418	0.415	0.421	0.418	0.358	0.388	0
Utility plants	0	0	0	0	0	0	0.193	0.132	0
Noncorporate--									
Computers/office equipment	0.078	0.090	0	0	0	0	0.128	0.146	0
Service and furnishing equipment	0.049	0.062	0	0	0	0	0.156	0.135	0
Heavy machinery	0.090	0.094	0	0	0	0	0.135	0.142	0
Transportation equipment	0.121	0.132	0	0	0	0	0.203	0.206	0
Industrial plants	-0.019	-0.003	0	0	0	0	0.159	0.188	0
Utility plants	0	0	0	0	0	0	-0.040	-0.066	0
Farmland	0.272	0.271	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.218	0	0.033
Labor services ¹	0.356	0.356	0.344	0.346	0.344	0.346	0.346	0	0

Table 5--Federal primary factor tax wedges, by industry, region, and factor type--Continued

Region/ factor	Cash Farms	grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per dollar of value added</i>									
Lake States:									
Corporate--									
Computers/office equipment	0	0	0.358	0.360	0.345	0.360	0.336	0.369	0
Service and furnishing equipment	0	0	0.359	0.362	0.363	0.360	0.372	0.356	0
Heavy machinery	0	0	0.367	0.369	0.373	0.366	0.345	0.360	0
Transportation equipment	0	0	0.427	0.429	0.427	0.434	0.418	0.418	0
Industrial plants	0	0	0.432	0.434	0.433	0.433	0.378	0.410	0
Utility plants	0	0	0	0	0	0	0.278	0.164	0
Noncorporate--									
Computers/office equipment	0.208	0.210	0	0	0	0	0.154	0.175	0
Service and furnishing equipment	0.188	0.189	0	0	0	0	0.179	0.161	0
Heavy machinery	0.210	0.208	0	0	0	0	0.164	0.168	0
Transportation equipment	0.237	0.241	0	0	0	0	0.230	0.227	0
Industrial plants	0.141	0.146	0	0	0	0	0.182	0.210	0
Utility plants	0	0	0	0	0	0	0.096	-0.030	0
Farmland	0.262	0.262	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.219	0	0.038
Labor services ¹	0.325	0.325	0.334	0.333	0.339	0.341	0.339	0	0
Mountain:									
Corporate--									
Computers/office equipment	0	0	0.353	0.353	0.336	0.357	0.325	0.359	0
Service and furnishing equipment	0	0	0.354	0.354	0.356	0.356	0.363	0.349	0
Heavy machinery	0	0	0.363	0.363	0.367	0.346	0.337	0.353	0
Transportation equipment	0	0	0.425	0.425	0.424	0.433	0.412	0.412	0
Industrial plants	0	0	0.430	0.431	0.431	0.431	0.373	0.403	0
Utility plants	0	0	0	0	0	0	0.224	0.144	0
Noncorporate--									
Computers/office equipment	0.156	0.162	0	0	0	0	0.142	0.162	0
Service and furnishing equipment	0.125	0.133	0	0	0	0	0.168	0.151	0
Heavy machinery	0.165	0.164	0	0	0	0	0.151	0.157	0
Transportation equipment	0.202	0.205	0	0	0	0	0.221	0.218	0
Industrial plants	0.053	0.069	0	0	0	0	0.174	0.201	0
Utility plants	0	0	0	0	0	0	0.035	-0.053	0
Farmland	0.280	0.276	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.219	0	0.036
Labor services ¹	0.379	0.371	0.342	0.347	0.340	0.342	0.342	0	0
Northeast:									
Corporate--									
Computers/office equipment	0	0	0.341	0.345	0.325	0.344	0.318	0.351	0
Service and furnishing equipment	0	0	0.342	0.346	0.347	0.343	0.356	0.338	0
Heavy machinery	0	0	0.351	0.354	0.354	0.339	0.329	0.343	0
Transportation equipment	0	0	0.410	0.414	0.413	0.415	0.402	0.401	0
Industrial plants	0	0	0.413	0.417	0.413	0.417	0.365	0.392	0
Utility plants	0	0	0	0	0	0	0.246	0.157	0
Noncorporate--									
Computers/office equipment	0.064	0.089	0	0	0	0	0.144	0.162	0
Service and furnishing equipment	0.035	0.062	0	0	0	0	0.169	0.149	0
Heavy machinery	0.068	0.091	0	0	0	0	0.156	0.155	0
Transportation equipment	0.105	0.129	0	0	0	0	0.219	0.215	0
Industrial plants	-0.041	0	0	0	0	0	0.174	0.198	0
Utility plants	0	0	0	0	0	0	0.071	-0.025	0
Farmland	0.277	0.275	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.218	0	0.044
Labor services ¹	0.371	0.367	0.335	0.330	0.334	0.332	0.331	0	0

Table 5--Federal primary factor tax wedges, by industry, region, and factor type--Continued

Region/ factor	Cash Farms	Cash grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per dollar of value added</i>									
Northern Plains:									
Corporate--									
Computers/office equipment	0	0	0.346	0.351	0.333	0.356	0.322	0.360	0
Service and furnishing equipment	0	0	0.347	0.352	0.355	0.357	0.363	0.346	0
Heavy machinery	0	0	0.356	0.361	0.368	0.360	0.333	0.351	0
Transportation equipment	0	0	0.419	0.424	0.427	0.432	0.405	0.413	0
Industrial plants	0	0	0.418	0.422	0.433	0.437	0.370	0.403	0
Utility plants	0	0	0	0	0	0	0.212	0.143	0
Noncorporate--									
Computers/office equipment	0.170	0.163	0	0	0	0	0.131	0.154	0
Service and furnishing equipment	0.149	0.142	0	0	0	0	0.160	0.139	0
Heavy machinery	0.173	0.164	0	0	0	0	0.134	0.146	0
Transportation equipment	0.202	0.196	0	0	0	0	0.212	0.209	0
Industrial plants	0.102	0.098	0	0	0	0	0.163	0.191	0
Utility plants	0	0	0	0	0	0	0.034	-0.058	0
Farmland	0.264	0.263	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.219	0	0.036
Labor services ¹	0.330	0.329	0.340	0.341	0.340	0.339	0.342	0	0
Pacific:									
Corporate--									
Computers/office equipment	0	0	0.345	0.342	0.327	0.339	0.317	0.353	0
Service and furnishing equipment	0	0	0.347	0.344	0.348	0.340	0.354	0.342	0
Heavy machinery	0	0	0.355	0.352	0.355	0.339	0.333	0.345	0
Transportation equipment	0	0	0.417	0.413	0.413	0.414	0.400	0.405	0
Industrial plants	0	0	0.425	0.420	0.423	0.418	0.362	0.393	0
Utility plants	0	0	0	0	0	0	0.220	0.160	0
Noncorporate--									
Computers/office equipment	0.148	0.129	0	0	0	0	0.139	0.159	0
Service and furnishing equipment	0.116	0.097	0	0	0	0	0.165	0.148	0
Heavy machinery	0.157	0.133	0	0	0	0	0.150	0.153	0
Transportation equipment	0.198	0.179	0	0	0	0	0.217	0.216	0
Industrial plants	0.042	0.020	0	0	0	0	0.170	0.196	0
Utility plants	0	0	0	0	0	0	0.058	-0.030	0
Farmland	0.280	0.278	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.219	0	0.030
Labor services ¹	0.384	0.377	0.348	0.349	0.349	0.350	0.348	0	0
Southern Plains:									
Corporate--									
Computers/office equipment	0	0	0.345	0.345	0.331	0.342	0.314	0.349	0
Service and furnishing equipment	0	0	0.346	0.346	0.352	0.342	0.355	0.341	0
Heavy machinery	0	0	0.356	0.356	0.357	0.335	0.326	0.345	0
Transportation equipment	0	0	0.422	0.422	0.420	0.423	0.397	0.408	0
Industrial plants	0	0	0.427	0.427	0.428	0.425	0.373	0.399	0
Utility plants	0	0	0	0	0	0	0.174	0.131	0
Noncorporate--									
Computers/office equipment	0.130	0.143	0	0	0	0	0.109	0.135	0
Service and furnishing equipment	0.104	0.119	0	0	0	0	0.141	0.123	0
Heavy machinery	0.137	0.144	0	0	0	0	0.123	0.130	0
Transportation equipment	0.168	0.176	0	0	0	0	0.199	0.200	0
Industrial plants	0.051	0.067	0	0	0	0	0.153	0.177	0
Utility plants	0	0	0	0	0	0	-0.060	-0.086	0
Farmland	0.277	0.271	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.220	0	0.019
Labor services ¹	0.371	0.368	0.363	0.361	0.361	0.364	0.362	0	0

Table 5--Federal primary factor tax wedges, by industry, region, and factor type--Continued

Region/ factor	Cash Farms	grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per \$ of value added</i>									
Southeast:									
Corporate--									
Computers/office equipment	0	0	0.336	0.330	0.325	0.337	0.307	0.345	0
Service and furnishing equipment	0	0	0.337	0.338	0.346	0.337	0.349	0.333	0
Heavy machinery	0	0	0.346	0.347	0.350	0.333	0.318	0.337	0
Transportation equipment	0	0	0.410	0.411	0.411	0.414	0.396	0.398	0
Industrial plants	0	0	0.416	0.417	0.416	0.412	0.354	0.386	0
Utility plants	0	0	0	0	0	0	0.235	0.115	0
Noncorporate--									
Computers/office equipment	0.098	0.131	0	0	0	0	0.125	0.146	0
Service and furnishing equipment	0.067	0.103	0	0	0	0	0.154	0.133	0
Heavy machinery	0.106	0.135	0	0	0	0	0.135	0.138	0
Transportation equipment	0.145	0.173	0	0	0	0	0.208	0.206	0
Industrial plants	-0.013	0.038	0	0	0	0	0.155	0.184	0
Utility plants	0	0	0	0	0	0	0.072	-0.099	0
Farmland	0.274	0.272	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.219	0	0.024
Labor services ¹	0.375	0.360	0.352	0.354	0.350	0.346	0.356	0	0
United States:									
Corporate--									
Computers/office equipment	0	0	0.349	0.353	0.333	0.349	0.321	0.356	0
Service and furnishing equipment	0	0	0.351	0.359	0.354	0.348	0.359	0.344	0
Heavy machinery	0	0	0.359	0.368	0.361	0.345	0.332	0.349	0
Transportation equipment	0	0	0.420	0.429	0.419	0.422	0.403	0.408	0
Industrial plants	0	0	0.426	0.434	0.425	0.425	0.367	0.398	0
Utility plants	0	0	0	0	0	0	0.227	0.139	0
Noncorporate--									
Computers/office equipment	0.144	0.154	0	0	0	0	0.140	0.162	0
Service and furnishing equipment	0.117	0.130	0	0	0	0	0.167	0.150	0
Heavy machinery	0.148	0.154	0	0	0	0	0.151	0.156	0
Transportation equipment	0.181	0.191	0	0	0	0	0.219	0.218	0
Industrial plants	0.054	0.076	0	0	0	0	0.171	0.199	0
Utility plants	0	0	0	0	0	0	0.026	-0.065	0
Farmland	0.272	0.268	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.219	0	0.036
Labor services ¹	0.363	0.345	0.341	0.341	0.341	0.342	0.342	0	0
All sectors--									
Capital services	0.206	0.222	0.379	0.385	0.375	0.366	0.288	0.316	0.036
Value added services	0.288	0.262	0.362	0.371	0.353	0.354	0.322	0.316	0.036

¹Rate includes Federal insurance trust wage tax.

taxes around the industry mean capital tax rate indicates that the Federal capital tax drives significant amounts of capital out of higher taxed industry and into industry with less efficient uses for this capital.

Regional variations largely mirror the national figures, but some trends do stand out. For example, noncorporate capital taxes in the Northeast show far more variation than in tax rates across regions. Every type of noncorporate capital except farmland has a standard deviation of tax rates across industries of between 30 and 209 percent of the (unweighted) mean tax rate. The Northeast also has an unusually high standard deviation on labor tax rates across industry at 5 percent of mean. The Northeast, Southeast, and Southern Plains regions show the highest overall variation of tax rates across industries, but no region is significantly different in such variation from the national average. All manufacturing, food and nonfood, is more heavily taxed than other industries in every region. This is due to the pure corporate nature of this industry.

Comparisons of Regional Marginal Tax Rates on Income From Capital and Labor

Regional taxation of primary industrial factors is in stark contrast to Federal taxation (table 6). Agriculture is the most heavily taxed industry by regional governments, with marginal tax incidence on capital averaging 12 percent overall and marginal tax incidence for labor averaging 9 percent overall. Beverages and tobacco are the most lightly factor-taxed industries by regional governments. Aside from the reversal of favoritism, the overall level of taxation on industry capital is surprisingly high. The reason for these high marginal rates is that property taxation, a major tax instrument of regional governments, uses value as its tax base, while the fact that it is administered annually means that this tax effectively falls on annual capital income. With value of capital stock several times the value of annual capital rents, clearly a low property tax rate is converted into a much higher capital income tax rate. If we exclude leased residential structures from

the services, mines, and trade industry, we find that no other industry faces an overall U.S. average capital tax rate of more than 9.4 percent. Farms also face a significant plant/equipment tax wedge, with farm buildings taxed significantly less than farm equipment. For other industry, no such wedge exists.

Overall variation of taxation across industries is slightly lower than at the Federal level. Other than farms, there is a fairly uniform tax rate across industries. Labor is taxed at a uniform rate and, unlike at the Federal level, residential shelter is heavily taxed by regional governments. Conspicuously absent from regional tax policy is the existence of a corporate tax wedge.

What is not evident from the national average numbers is the fact that regional variation of factor taxation is significant. In every region, either a farm or food industry has the highest marginal tax rate on capital income. While most regions tax farms at a higher rate than they do other industries, the Delta States are an exception. With very low overall tax rates in the Delta, farms are taxed at a lower rate than three of the other six industries. Cash grain farms rank third in taxation in the Lake States and Southeast. Otherwise, cash grain and other farms rank 1 or 2 in taxation in all other regions. The overall level of taxation in agriculture ranges from 4.6 percent in the Delta to 18.8 percent in Northeastern States. In the Northeast, the marginal tax rate on capital (0.188) is actually higher than the Federal marginal rate (0.145). The Delta and Mountain regions are the only two areas where the marginal tax on labor is higher than on capital. In each region, land and buildings are taxed at a lower rate than other equipment.

In 6 of the 10 regions, food manufacturers are ranked between 4 and 6 in marginal tax burden on capital income. Notable exceptions include the Delta States, where food manufacturers are taxed more heavily than any other industry, and the Pacific States, where they are the most lightly taxed industry.

Table 6--Regional primary factor tax wedges, by industry, region, and factor type

Region/ factor	Cash Farms	grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per dollar of value added</i>									
Appalachian:									
Corporate--									
Computers/office equipment	0	0	0.052	0.058	0.051	0.054	0.051	0.055	0
Service and furnishing equipment	0	0	0.052	0.059	0.053	0.054	0.054	0.054	0
Heavy machinery	0	0	0.054	0.061	0.053	0.053	0.051	0.054	0
Transportation equipment	0	0	0.058	0.065	0.058	0.060	0.058	0.060	0
Industrial plants	0	0	0.052	0.058	0.054	0.056	0.051	0.055	0
Utility plants	0	0	0	0	0	0	0.036	0.005	0
Noncorporate--									
Computers/office equipment	0.101	0.096	0	0	0	0	0.031	0.035	0
Service and furnishing equipment	0.102	0.097	0	0	0	0	0.033	0.033	0
Heavy machinery	0.104	0.097	0	0	0	0	0.029	0.034	0
Transportation equipment	0.101	0.095	0	0	0	0	0.039	0.041	0
Industrial plants	-0.017	-0.016	0	0	0	0	0.028	0.033	0
Utility plants	0	0	0	0	0	0	0.012	-0.036	0
Farmland	0.060	0.060	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.080	0	0.078
Labor services ¹	0.099	0.097	0.088	0.101	0.090	0.085	0.090	0	0
Corn Belt:									
Corporate--									
Computers/office equipment	0	0	0.081	0.077	0.087	0.079	0.080	0.085	0
Service and furnishing equipment	0	0	0.081	0.076	0.087	0.080	0.083	0.083	0
Heavy machinery	0	0	0.082	0.077	0.089	0.081	0.082	0.084	0
Transportation equipment	0	0	0.083	0.079	0.091	0.084	0.084	0.086	0
Industrial plants	0	0	0.097	0.091	0.100	0.088	0.100	0.101	0
Utility plants	0	0	0	0	0	0	0.098	0.108	0
Noncorporate--									
Computers/office equipment	0.171	0.179	0	0	0	0	0.074	0.075	0
Service and furnishing equipment	0.175	0.185	0	0	0	0	0.074	0.074	0
Heavy machinery	0.172	0.181	0	0	0	0	0.075	0.075	0
Transportation equipment	0.164	0.171	0	0	0	0	0.075	0.076	0
Industrial plants	0.069	0.081	0	0	0	0	0.112	0.108	0
Utility plants	0	0	0	0	0	0	0.114	0.137	0
Farmland	0.097	0.102	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.129	0	0.150
Labor services	0.097	0.091	0.091	0.095	0.091	0.090	0.089	0	0
Delta States:									
Corporate--									
Computers/office equipment	0	0	0.049	0.045	0.047	0.039	0.036	0.042	0
Service and furnishing equipment	0	0	0.048	0.045	0.049	0.039	0.044	0.042	0
Heavy machinery	0	0	0.051	0.048	0.050	0.038	0.036	0.043	0
Transportation equipment	0	0	0.059	0.056	0.057	0.052	0.049	0.053	0
Industrial plants	0	0	0.062	0.062	0.060	0.057	0.053	0.058	0
Utility plants	0	0	0	0	0	0	0.022	0.008	0
Noncorporate--									
Computers/office equipment	0.053	0.055	0	0	0	0	-0.013	-0.006	0
Service and furnishing equipment	0.049	0.051	0	0	0	0	-0.006	-0.008	0
Heavy machinery	0.056	0.056	0	0	0	0	-0.014	-0.006	0
Transportation equipment	0.060	0.059	0	0	0	0	0.006	0.009	0
Industrial plants	-0.049	-0.052	0	0	0	0	0.015	0.021	0
Utility plants	0	0	0	0	0	0	-0.021	-0.026	0
Farmland	0.053	0.056	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.058	0	0.041
Labor services	0.098	0.100	0.096	0.092	0.094	0.091	0.092	0	0

See footnote at end of table.

Continued--

Table 6--Regional primary factor tax wedges, by industry, region, and factor type--Continued

Region/ factor	Cash Farms	grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per dollar of value added</i>									
Lakes States:									
Corporate--									
Computers/office equipment	0	0	0.085	0.086	0.085	0.096	0.093	0.089	0
Service and furnishing equipment	0	0	0.084	0.085	0.087	0.095	0.089	0.089	0
Heavy machinery	0	0	0.085	0.086	0.088	0.095	0.093	0.089	0
Transportation equipment	0	0	0.084	0.084	0.085	0.087	0.086	0.086	0
Industrial plants	0	0	0.131	0.138	0.138	0.141	0.161	0.151	0
Utility plants	0	0	0	0	0	0	0.203	0.317	0
Noncorporate--									
Computers/office equipment	0.196	0.173	0	0	0	0	0.122	0.115	0
Service and furnishing equipment	0.200	0.176	0	0	0	0	0.120	0.115	0
Heavy machinery	0.205	0.173	0	0	0	0	0.123	0.115	0
Transportation equipment	0.199	0.168	0	0	0	0	0.119	0.113	0
Industrial plants	0.171	0.115	0	0	0	0	0.245	0.233	0
Utility plants	0	0	0	0	0	0	0.272	0.459	0
Farmland	0.168	0.154	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.268	0	0.346
Labor services	0.105	0.108	0.105	0.104	0.099	0.098	0.101	0	0
Mountain:									
Corporate--									
Computers/office equipment	0	0	0.047	0.072	0.062	0.041	0.066	0.064	0
Service and furnishing equipment	0	0	0.047	0.071	0.060	0.042	0.064	0.063	0
Heavy machinery	0	0	0.048	0.072	0.060	0.043	0.058	0.063	0
Transportation equipment	0	0	0.049	0.068	0.060	0.042	0.064	0.064	0
Industrial plants	0	0	0.053	0.071	0.082	0.050	0.081	0.088	0
Utility plants	0	0	0	0	0	0	0.088	0.041	0
Noncorporate--									
Computers/office equipment	0.138	0.133	0	0	0	0	0.071	0.067	0
Service and furnishing equipment	0.142	0.134	0	0	0	0	0.071	0.067	0
Heavy machinery	0.139	0.134	0	0	0	0	0.066	0.068	0
Transportation equipment	0.134	0.131	0	0	0	0	0.072	0.070	0
Industrial plants	0.029	-0.016	0	0	0	0	0.100	0.114	0
Utility plants	0	0	0	0	0	0	0.108	0.033	0
Farmland	0.085	0.087	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.135	0	0.150
Labor services	0.100	0.109	0.101	0.091	0.095	0.084	0.089	0	0
Northeast:									
Corporate--									
Computers/office equipment	0	0	0.124	0.116	0.122	0.129	0.123	0.115	0
Service and furnishing equipment	0	0	0.124	0.116	0.123	0.129	0.120	0.115	0
Heavy machinery	0	0	0.124	0.117	0.122	0.129	0.121	0.116	0
Transportation equipment	0	0	0.123	0.115	0.121	0.125	0.119	0.115	0
Industrial plants	0	0	0.127	0.119	0.127	0.138	0.122	0.114	0
Utility plants	0	0	0	0	0	0	0.124	0.131	0
Noncorporate--									
Computers/office equipment	0.273	0.238	0	0	0	0	0.141	0.127	0
Service and furnishing equipment	0.283	0.246	0	0	0	0	0.139	0.127	0
Heavy machinery	0.275	0.238	0	0	0	0	0.140	0.128	0
Transportation equipment	0.259	0.227	0	0	0	0	0.135	0.125	0
Industrial plants	0.113	0.098	0	0	0	0	0.146	0.127	0
Utility plants	0	0	0	0	0	0	0.170	0.176	0
Farmland	0.121	0.114	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.177	0	0.192
Labor services	0.106	0.103	0.101	0.106	0.103	0.101	0.109	0	0

See footnote at end of table.

Continued--

Table 6--Regional primary factor tax wedges, by industry, region, and factor type--Continued

Region/ factor	Cash Farms grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter	
<i>Taxes per dollar of value added</i>									
Northern Plains:									
Corporate--									
Computers/office equipment	0	0	0.046	0.040	0.045	0.034	0.039	0.039	0
Service and furnishing equipment	0	0	0.046	0.040	0.043	0.033	0.041	0.039	0
Heavy machinery	0	0	0.046	0.040	0.042	0.034	0.038	0.040	0
Transportation equipment	0	0	0.048	0.041	0.042	0.036	0.042	0.039	0
Industrial plants	0	0	0.102	0.086	0.064	0.028	0.064	0.061	0
Utility plants	0	0	0	0	0	0	0.056	0.040	0
Noncorporate--									
Computers/office equipment	0.144	0.147	0	0	0	0	0.052	0.054	0
Service and furnishing equipment	0.148	0.151	0	0	0	0	0.053	0.052	0
Heavy machinery	0.144	0.148	0	0	0	0	0.052	0.054	0
Transportation equipment	0.138	0.142	0	0	0	0	0.058	0.059	0
Industrial plants	0.082	0.070	0	0	0	0	0.103	0.099	0
Utility plants	0	0	0	0	0	0	0.120	0.042	0
Farmland	0.109	0.103	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.125	0	0.144
Labor services	0.091	0.088	0.094	0.095	0.099	0.104	0.093	0	0
Pacific:									
Corporate--									
Computers/office equipment	0	0	0.076	0.078	0.077	0.080	0.076	0.076	0
Service and furnishing equipment	0	0	0.075	0.078	0.078	0.079	0.078	0.075	0
Heavy machinery	0	0	0.077	0.079	0.078	0.080	0.076	0.076	0
Transportation equipment	0	0	0.076	0.080	0.079	0.082	0.079	0.077	0
Industrial plants	0	0	0.078	0.083	0.078	0.083	0.083	0.082	0
Utility plants	0	0	0	0	0	0	0.082	0.104	0
Noncorporate--									
Computers/office equipment	0.181	0.214	0	0	0	0	0.074	0.076	0
Service and furnishing equipment	0.188	0.224	0	0	0	0	0.073	0.075	0
Heavy machinery	0.183	0.214	0	0	0	0	0.077	0.077	0
Transportation equipment	0.173	0.197	0	0	0	0	0.078	0.079	0
Industrial plants	0.037	0.078	0	0	0	0	0.085	0.086	0
Utility plants	0	0	0	0	0	0	0.103	0.144	0
Farmland	0.091	0.088	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.116	0	0.131
Labor services	0.106	0.091	0.097	0.101	0.098	0.102	0.100	0	0
Southern Plains:									
Corporate--									
Computers/office equipment	0	0	0.042	0.042	0.041	0.044	0.046	0.042	0
Service and furnishing equipment	0	0	0.042	0.041	0.040	0.043	0.041	0.043	0
Heavy machinery	0	0	0.041	0.041	0.040	0.045	0.044	0.043	0
Transportation equipment	0	0	0.035	0.035	0.035	0.035	0.038	0.037	0
Industrial plants	0	0	0.050	0.050	0.049	0.051	0.058	0.055	0
Utility plants	0	0	0	0	0	0	0.091	0.100	0
Noncorporate--									
Computers/office equipment	0.143	0.119	0	0	0	0	0.078	0.076	0
Service and furnishing equipment	0.150	0.123	0	0	0	0	0.074	0.078	0
Heavy machinery	0.139	0.118	0	0	0	0	0.077	0.077	0
Transportation equipment	0.132	0.115	0	0	0	0	0.067	0.067	0
Industrial plants	0.080	0.058	0	0	0	0	0.107	0.106	0
Utility plants	0	0	0	0	0	0	0.154	0.163	0
Farmland	0.066	0.066	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.098	0	0.144
Labor services	0.055	0.058	0.048	0.050	0.050	0.045	0.048	0	0

See footnote at end of table.

Continued--

Table 6--Regional primary factor tax wedges, by industry, region, and factor type--Continued

Region/ factor	Farms	Cash grains	Food	Beverages, tobacco	Manu- facturing	Chemicals, rubber, plastic	Services, mines, trade	Construc- tion	Owner-occupied shelter
<i>Taxes per dollar of value added</i>									
Southeast:									
Corporate--									
Computers/office equipment	0	0	0.108	0.113	0.094	0.078	0.123	0.120	0
Service and furnishing equipment	0	0	0.107	0.112	0.087	0.077	0.119	0.120	0
Heavy machinery	0	0	0.107	0.110	0.087	0.078	0.114	0.119	0
Transportation equipment	0	0	0.100	0.100	0.086	0.077	0.111	0.111	0
Industrial plants	0	0	0.064	0.065	0.059	0.057	0.081	0.084	0
Utility plants	0	0	0	0	0	0	0.070	0.035	0
Noncorporate--									
Computers/office equipment	0.267	0.206	0	0	0	0	0.166	0.162	0
Service and furnishing equipment	0.280	0.213	0	0	0	0	0.160	0.163	0
Heavy machinery	0.266	0.206	0	0	0	0	0.157	0.160	0
Transportation equipment	0.238	0.196	0	0	0	0	0.144	0.145	0
Industrial plants	0.049	-0.005	0	0	0	0	0.087	0.091	0
Utility plants	0	0	0	0	0	0	0.075	0.018	0
Farmland	0.065	0.065	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.099	0	0.121
Labor services	0.065	0.093	0.080	0.076	0.082	0.088	0.069	0	0
United States:									
Corporate--									
Computers/office equipment	0	0	0.078	0.072	0.081	0.074	0.087	0.084	0
Service and furnishing equipment	0	0	0.078	0.072	0.081	0.074	0.087	0.084	0
Heavy machinery	0	0	0.079	0.072	0.081	0.075	0.081	0.085	0
Transportation equipment	0	0	0.078	0.073	0.082	0.076	0.084	0.084	0
Industrial plants	0	0	0.090	0.073	0.088	0.084	0.094	0.092	0
Utility plants	0	0	0	0	0	0	0.091	0.074	0
Noncorporate--									
Computers/office equipment	0.167	0.158	0	0	0	0	0.098	0.092	0
Service and furnishing equipment	0.172	0.163	0	0	0	0	0.097	0.092	0
Heavy machinery	0.171	0.160	0	0	0	0	0.093	0.093	0
Transportation equipment	0.161	0.152	0	0	0	0	0.094	0.091	0
Industrial plants	0.064	0.064	0	0	0	0	0.113	0.107	0
Utility plants	0	0	0	0	0	0	0.114	0.101	0
Farmland	0.094	0.099	0	0	0	0	0	0	0
Residential--									
Shelter	0	0	0	0	0	0	0.137	0	0.160
Labor services ¹	0.094	0.092	0.092	0.095	0.092	0.089	0.092	0	0
All sectors--									
Capital services	0.119	0.116	0.082	0.072	0.083	0.077	0.094	0.088	0.160
Value added services	0.106	0.108	0.086	0.080	0.089	0.082	0.093	0.088	0.160

¹Rate includes State insurance trust wage tax.